

CHAPTER 7

Reluctant Regionalism Japan and Asia

While Europe and North America have implemented significant initiatives to liberalize regional trade in recent years, trading blocs have not formed in Asia.¹ One important factor in this trend is that until recently Japan remained a committed member of the “friends of Article I club” (Scollay and Gilbert 2001, 4 n. 7).² Finally, in 2001, Japan concluded the Japan-Singapore Economic Partnership Agreement (JSEPA), its first regional arrangement. That year Japan’s Ministry of Economy, Trade, and Industry (METI), in its annual white paper, raised the prospect of future agreements with South Korea, Mexico, and Chile. At the 2002 ASEAN summit, Japan proposed discussions for a free trade area with Southeast Asia.³

Japan’s conversion to regionalism has been slow, and it is incomplete. To be sure, factors that would motivate domestic groups to seek regional arrangements have gained importance of late. Most significant, Japanese multinationals have invested extensively in ASEAN countries. Over time, many of these investments have been integrated into cross-border production networks linking ASEAN countries more closely with one another and (occasionally) Japan. Japanese companies recently have developed offshore procurement bases in coastal China as well; as production sharing expands and reverse imports into Japan increase, firms have incentives to push to abolish the remaining barriers to entering the Chinese market and exporting back to Japan. Thus, growing trade linked to FDI and foreign production is integrating the Japanese econ-

1. The ASEAN Free Trade Area (AFTA) is scheduled for completion by 2005, but to date many details of this arrangement have not been formalized, product coverage is limited, and final implementation remains uncertain.

2. This moniker refers to the MFN commitment in GATT Article I.

3. “Japan Softens Stand on Asian Free-Trade Pact,” *Financial Times*, September 14, 2002, 7.

omy more closely with labor-rich Asia. This trend has created interests in further liberalization, guarantees for investment, and semiformal agreements and institutions to manage these “economic partnerships,” as the Japanese government calls them.

Weighed against the factors pushing Japan closer to Asia are forces that continue to pull the two areas apart. Foremost are ongoing pressures for trade protection. Japan’s agricultural market is hermetically closed despite commitments in the Uruguay Round to liberalize. It is no surprise that Singapore, which has almost no domestic agriculture, was selected to launch Japan’s experiment with regional arrangements. In the manufactured products that Asia exports, Japanese industry is protected with high tariffs (footwear and leather), actual or threatened nontariff barriers (textiles and apparel), and keiretsu ties and cartel practices (basic materials such as steel, nonferrous metals, petrochemicals, and cement). Domestic resistance to opening this market, regionally or multilaterally, remains strong.

A closer look further suggests that incentives for a trading bloc in Asia are not broadly distributed in Japan. Only a handful of industries, such as electronics and precision instruments, have developed production-sharing networks conducive to the formation of regional arrangements. In other industries with FDI in Asia, producers are divided in their preferences (textiles and apparel), or they oppose liberalization between Japan and the region (automobiles). In contrast to production sharing in North America and Western Europe, offshore manufacturing by Japanese firms rarely involves reverse imports into the home market; FDI integrates Asian economies more closely with one another, but not always with Japan. And even as production relationships become more tightly linked in the Asian region, sales of finished goods remain oriented to Western markets. External dependence raises the risks that regional arrangements in Asia will provoke protectionist responses elsewhere.

Thus, Japan’s pursuit of regional arrangements has been delayed and tentative, and it is likely to remain so. The trade agreement with Singapore minimized the potential domestic resistance in Japan. When (or if) discussions proceed with South Korea, China, and ASEAN, the costs for protected Japanese producers rise while the benefits for companies that have established production offshore remain diffuse and limited. In Southeast Asia, Japanese companies are likely to show greater interest in AFTA than in free trade between ASEAN and Japan. In short, the book’s analytical framework does not anticipate the formation of a yen bloc in Asia or a significant burst of regional initiatives from Japan.

Scale Economies and Postwar Japan

Japan achieved its postwar economic development without the assistance of a trading bloc—a feat the country could not accomplish before World War II, as chapter 3 shows. In the years after the war, a major concern for U.S. officials was “the terrific problem of how the Japanese are going to get along unless they again reopen some sort of empire toward the south,” as George Kennan put it in a 1949 State Department meeting. The Central Intelligence Agency concluded, “Japan for normal economic functioning on an industrial basis, must have access to the Northeast Asiatic areas—notably North China, Manchuria, and Korea,” and without these markets and raw materials sources there was “no hope of achieving a viable economy” (Cumings 1984, 18). Industrialists in rebuilding industries such as cotton spinning “openly bemoaned the loss of Japan’s colonial market in Manchuria, Korea, and China” (Uriu 1996, 47). But the U.S. military occupation and the migration of Japan’s former colonies (except for Taiwan) to the Soviet camp ruled out any initiative to reconstitute the prewar Co-Prosperty Sphere, even in a more benign form.

How did Japanese industry develop after the war shorn of its prewar empire? One prominent thesis is that producers specialized in goods with smaller returns to scale. In this argument, Japanese firms developed “flexible manufacturing strategies” to produce differentiated goods in small batches instead of standardized articles in long production runs. In automobiles, for example, the Kanban system of “lean production” permitted the design of larger varieties of bodies and engines relative to total volume to differentiate production. Rather than building large, vertically integrated enterprises, manufacturers outsourced components to independent suppliers who provided parts through “just-in-time” delivery systems. Though this method sacrificed scale economies, it also minimized excess capacity and focused on cost savings through higher product quality, lower inventories, and less downtime for machinery and equipment (Friedman 1988, 9–23, 156–60).

If true, this would have alleviated the need for a large captive market to sustain mass production. However, after accounting for higher rates of subcontracting, Japanese industry generally has produced on a scale comparable with industries in the United States and Europe since the 1970s. In 1986, for example, Japanese automakers assembled 231,321 vehicles per plant, compared to 197,498 for plants in the United States (calculated from METI 1988; U.S. Bureau of the Census 1997). In fact, Toyota assembled 337,220 vehicles on average in its Japanese factories in 2001—very close to the MES of 500,000 units (United Nations Conference on Trade and Development [UNCTAD] 2002,

133, 286). Chapters 5 and 6 present evidence that the cost advantages of Japanese companies in TVs and VCRs also inhere in production runs up to three times longer than those of U.S. and European firms. Thus, while production is less vertically integrated in Japan, it is not the case that the scale of output is smaller in parts-intensive, assembly-based automotive equipment, consumer electronics, and electrical appliances.

Japanese companies were able to attain high rates of output for two important reasons. First, the Japanese economy was integrated into an “American-managed free trade regime” early in the postwar period. This promoted “trade triangles” in which firms acquired raw materials from Asia and manufactured finished products for export to the United States (Cumings 1984, 16–19). An open U.S. market enabled Japanese products from transistor radios to televisions, automobiles, and integrated circuits to achieve rapid export penetration once they gained an initial price advantage. In televisions, for example, “Japanese firms had the advantage of the large combined [National Television Standards Committee] markets in Japan and the United States in which to exploit scale economies” (Cawson et al. 1990, 224).⁴ Specializing for markets in the West thereby enabled Japanese companies to achieve globally competitive scales of production.

Second, once reconstruction was completed and living standards improved, Japan had a national market second only to the United States in size and wealth (Johnson 1982, 15–16). Along with “free access to overseas markets, which multiplied the returns to scale,” Japan also “had the good fortune . . . of having a large and rapidly growing domestic market” (Okimoto 1989, 25). Because Japan’s market was larger than any in Europe, the country was not limited to one or two national champions; instead, there was room for several world-class firms (Okimoto 1989, 107).

Exports to North America and Europe eventually allowed Japanese companies to grow larger and develop greater capacity than the domestic market alone could support. Since 1990, transport equipment, electrical machinery, and industrial machinery have accounted for more than 70 percent of Japan’s exports; just three product groups (automobiles and parts, electronic circuits and tubes, and audio and video equipment) routinely comprise one-third of all exports. Mostly these exports leave the Asian region for markets in the West. Because of low incomes in Asia and import substitution, Japan has never enjoyed a comparable market in the region. As a result of these historic trading

4. The National Television Standards Committee established the transmission standard for the United States in 1953.

patterns, the trend toward trading blocs in other regions naturally generated anxiety in Japan but produced little enthusiasm for Japan to seek regional arrangements of its own, at least until firms began moving offshore.

Japanese FDI and the East Asian Region

Japanese firms were slower than U.S. multinationals to invest in East Asia due to limits on capital outflows that persisted into the 1970s (Encarnation 1992, 149–51). As balance of payments surpluses led to the relaxation of capital controls and yen appreciation increased wage costs in Japan, companies responded to the lure of cheap labor in the newly industrialized economies (NIEs): South Korea, Taiwan, Hong Kong, and Singapore. Though some foreign affiliates targeted protected local markets, most were export platforms for apparel and electronic devices destined for Western markets. A second wave of FDI in the four years to 1982 focused on Southeast Asia, where Thailand, Malaysia, and Indonesia offered new export incentives with lower wage and currency costs than the NIEs.

The movement of Japanese companies offshore resumed and accelerated as the yen strengthened after the 1985 Plaza Accord. By 1989, Japanese FDI reached 5.9 percent of gross domestic product (GDP), compared to only 1 percent in 1980. Almost three-quarters of FDI between 1986 and 1989 went to North America and Europe, as industry responded to trade frictions and the trend toward trading blocs by opening manufacturing outlets in these markets, while Japanese banking and real estate took advantage of the strong yen to accumulate foreign financial assets and property. Though East Asia's share of Japanese FDI declined, average annual outflows increased sixfold. While the fastest growth occurred in finance, real estate, services, and infrastructure, FDI also increased significantly in manufacturing.⁵

Analysts observing the growth of Japanese FDI in East Asia expected that this trend would lead to the creation of regional institutions to manage trade, technology transfer, and dispute settlement among nations. A 1989 *Economist* survey suggested that the relocation of Japanese companies to East Asia was forming a de facto yen bloc in the region.⁶ According to Bernard and Ravenhill (1995, 171), the factors "driving the process of economic integration in East Asia" included "the globalization of production networks; increased intergovernmental disputes over bilateral economic relationships; and the rapid pace of technolog-

5. The preceding two paragraphs draw from Urata 1993, 275–79.

6. "The Yen Block" 1989.

ical change.” Several studies viewed this integration process pessimistically. According to Hatch and Yamamura (1996, 159, 163), the “emerging production alliance” represented “the regionalization of Japan’s vertical or supply keiretsu.” In this line of reasoning, the extension of Japanese networks of suppliers and distributors into East Asia, tight control over advanced technology, and foreign assistance tied to the purchase of Japanese goods raised entry barriers for Western firms and threatened to close the region to foreign business (Taylor 1995; Islam 1993). A prominent conventional wisdom therefore suggested that Japan was reconstituting its interwar Co-Prosperity Sphere, or at least a modern variant without formal institutional structures and openly aggressive behavior.

Still, myriad factors inhibited the development of an East Asian trading bloc, until recently. First, production sharing was not as extensive as in North America or Europe. To be sure, Japanese trade in intermediate components with East Asia expanded after 1985. Bernard and Ravenhill (1995, 177, 183) note the emergence of a “supply architecture . . . built around ongoing Japanese innovation of components, machinery, and materials” and conclude: “Malaysia, Thailand, and coastal China have all become linked to production in Northeast Asia, so that we may now speak of *regionalized* manufacturing activity in a number of industries.” But the UNCTC (1991, 51) points out that intrafirm trade in East Asia was low compared to other regions. Moreover, this trade flowed in one direction—from Japan, where the supply of “core technologies” and advanced components was centralized, to East Asia (Bernard and Ravenhill 1995, 178). As Japanese subcontractors followed original equipment manufacturers into the region, East Asian affiliates became less dependent on Japan, so trade declined as procurement networks expanded (Doner 1993, 172–73; Hatch and Yamamura 1996, 158–63).

Second, Japanese companies rarely used foreign plants to service the home market. Historically, U.S. affiliates in East Asia shipped one-third of their production back to North America, while Japanese affiliates sold primarily to third countries outside the region (Encarnation 1992, 157–58, 174–76). In the late 1980s, Japanese producers of home appliances such as electric refrigerators and air conditioners began to source more domestic sales from Thailand and Malaysia. In addition, Matsushita, Sanyo, and others transferred low-end consumer electronics production to Malaysia and Thailand after 1989. Yet companies did not terminate production of these items in Japan, and reverse imports of other products from East Asia were uncommon. In an ideal-type product cycle, “a more self-contained yen bloc would have emerged as exports of final manufactured products flowed back to Japan from other countries in East Asia” (Bernard and Ravenhill 1995, 185–86, 200).

Finally, even as the East Asian region became “increasingly integrated in terms of production,” it remained “outward-oriented in terms of trade” (Doner 1993, 160). While Japan’s North American and European affiliates manufactured and distributed finished products inside these regional markets, as recently as a decade ago factories in East Asia operated principally as export platforms to assemble intermediate goods for sale outside the region (Urata 1993, 283–85). Imports of Japanese technology and components for assembly, finishing, and sale abroad produced “trade triangles” in which East Asia ran trade deficits with Japan, offset in part by surpluses with the United States. Triangular trading patterns, and the technological dependence that created them, produced tension in Japan’s relations with South Korea, Taiwan, and ASEAN countries (Bernard and Ravenhill 1995, 200–3). Moreover, Japanese companies and their East Asian affiliates could not afford to jeopardize access to markets outside the region. The risk of retaliatory protectionism in North America or Europe therefore limited the potential benefits of regional arrangements.

These considerations help to explain why an East Asian trading bloc did not emerge in the decade after 1985, when Japanese companies were establishing production in the region. The question remains whether past trends have continued into the present or changed and whether incentives for regional arrangements have grown stronger in Japan of late. The book’s analytical framework anticipates that domestic pressure to liberalize regional trade and investment will intensify when production sharing becomes more broadly distributed at the industry level, intrafirm trade increases, and corporate strategies rely not only upon free access to the region from Japan but also free access to Japan from the region. Until these conditions are satisfied, the critical mass of political support in Japan will fail to develop.

To illuminate recent developments, the next section examines data on Japanese production, investment, and trade. The analysis reveals strong motives for producers of electrical equipment, industrial machinery, and precision instruments to seek regional arrangements; weak incentives for companies in the automotive industry; and mixed interests for firms manufacturing textiles and apparel. The section that follows presents case studies of these three groups of industries.

Production Sharing in Japanese Industry

The previous section identifies factors that have limited the incentives for Japanese firms to seek regional arrangements: overseas production was established only in the 1980s, and remained at an early stage of development by the

mid-1990s; export specialization for Western markets raised the risks of retaliation; production-sharing arrangements were concentrated in a small number of industries; and companies rarely reverse imported, so cross-border production networks failed to integrate Japan with the East Asian region.

In recent years, the movement of Japanese companies offshore has continued and accelerated—further linking production in the region while raising concerns about the “hollowing out” of Japanese industry. In 1995, according to the Japan External Trade Organization (JETRO), the overseas production ratio was 8 percent for Japan, 16 percent for the EC, and 26 percent for the United States.⁷ By 2000, Japan’s overseas production ratio had reached 13.4 percent. Between 1990 and 2000, employment in Japanese manufacturing declined 13 percent, from 15.2 million to 13.2 million, while employment in Japan’s foreign manufacturing affiliates more than doubled, from 1.2 million to 2.8 million. Reverse imports, displayed in figure 3, soared to ¥5.6 trillion, a threefold increase over ten years (METI 2002b, 1; JETRO 2002, 21).

Data at the industry level show, however, that not as much has changed as the figures detailed in the preceding may suggest.⁸ Table 35 shows modest growth in Japan’s intrafirm trade as a percentage of domestic sales. Yet intrafirm trade surpassed 7 percent of sales in only four industries: precision instruments, electrical machinery, transport equipment, and industrial machinery. Other industries engaged in little intrafirm trade, suggesting that Japanese production sharing with other countries was trivial. Moreover, intrafirm trade was mostly exports of technology, parts, and components from Japan. Japanese multinationals rarely used their foreign affiliates as procurement sources, as imports accounted for only 13.3 percent of intrafirm trade in 2000 and the industries with the highest intrafirm trade ratios showed the least propensity to import.

The figures on reverse imports in table 36 confirm that foreign affiliates were not major suppliers for Japanese production. Reverse imports accounted for only 1.8 percent of industry sales in 2000, up from 1.5 percent in 1997. Offshore procurement was most significant in precision instruments at nearly 10 percent of sales. Electrical machinery and industrial machinery registered

7. JETRO 1995, 20. This figure is the sales of foreign affiliates divided by domestic sales.

8. This analysis is based on survey data in METI 2003. Because METI lacks a legal mandate for these surveys, company responses are voluntary, so problems of sampling and coverage exist (see Ramstetter 1996). The dataset covers 89.7 percent of industry sales in 1999, the most recent year for which comparable Census of Manufacturing data are available. The data are tabulated quarterly, so the analysis compares the earliest four quarters (fourth quarter 1996–third quarter 1997) with the latest four quarters (second quarter 2000–first quarter 2001).

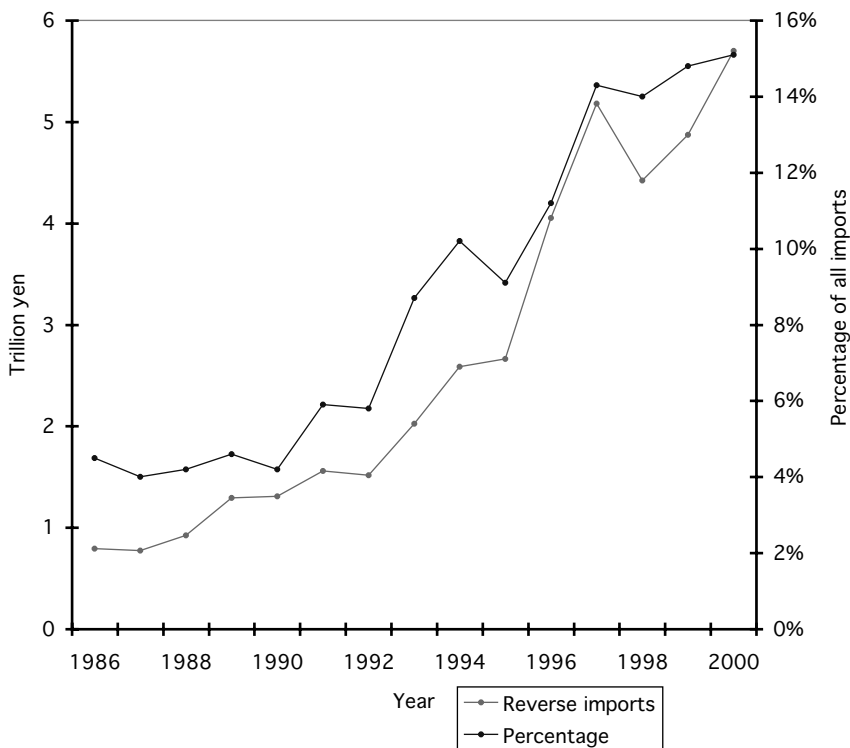


Fig. 3. Reverse imports in Japanese manufacturing, 1986–2000. (Data from METI, various years, “Survey of Overseas Business Activities,” <http://www.meti.go.jp/english/statistics/data/h2c4tope.html>.)

modest amounts of reverse imports, while offshore purchases were growing in ceramics, stone, and clay. In industries with substantial production overseas, imports from foreign affiliates were notably scarce in transport equipment and chemicals.⁹

The data in tables 35 and 36 include all Japanese affiliates in all regions. But the trade and investment patterns of Japanese companies in East Asia are most

9. To place these findings in context, in 1989 the United States reverse imported twice as much as a share of GDP, 3.6 percent. Reverse imports were greatest in transport equipment (11 percent of shipments), electrical machinery (6.9 percent), industrial machinery (6.1 percent), and chemicals (3 percent). Companies in the United States reverse imported significantly less than their Japanese counterparts only in precision instruments (2.2 percent). Figures were calculated from U.S. Bureau of Economic Analysis 1992 and U.S. Bureau of the Census 1997.

TABLE 35. Japanese Intrafirm Trade

Industry	Intrafirm Trade as a Percentage of Total Shipments			Intrafirm Imports as a Percentage of Total Intrafirm Trade 2000
	2000	1997	1989	
Precision instruments	30.0	24.3	21.1	17.0
Electrical machinery	23.1	17.8	15.6	13.5
Transport equipment	20.0	15.4	13.3	5.0
Industrial machinery	16.5	12.4	10.3	18.7
Nonferrous metals	6.8	3.6	2.2	29.8
Other manufacturing	6.6	5.9	7.9	31.4
Ceramics, stone, and clay	5.6	3.3	n.d.	23.8
Chemicals	5.1	3.6	2.5	14.3
Metals	3.6	2.2	n.d.	24.2
Textiles	1.9	1.2	1.5	59.0
Wood, pulp and paper	1.3	1.1	3.8	87.6
Food and tobacco	1.2	1.4	1.1	78.3
Iron and steel	1.2	0.6	0.3	28.7
All industries	12.1	10.6	9.9	13.3

Source: Data from METI 2003.

Note: n.d. = no data.

TABLE 36. Reverse Imports and Overseas Production Ratios in Japan

Industry	Reverse Imports ^a		Overseas Production Ratios ^b	
	2000	1997	2000	1997
Precision instruments	9.9	10.5	27.1	24.4
Electrical machinery	3.9	3.5	30.4	28.3
Industrial machinery	3.3	2.9	23.2	22.8
Ceramics, stone, and clay	2.2	1.0	25.4	16.6
Textiles	1.9	1.8	17.2	17.3
Wood, pulp and paper	1.5	1.1	7.2	5.7
Metals	1.0	1.2	7.1	7.2
Food and tobacco	0.8	0.9	7.0	7.5
Nonferrous metals	0.7	0.4	9.4	7.9
Other manufacturing	0.5	0.5	9.5	11.5
Chemicals	0.4	0.5	11.9	11.1
Transport equipment	0.3	0.2	35.9	26.2
Iron and steel	0.1	0.1	7.1	7.2
All industries	1.8	1.5	22.5	19.4

Source: Data from METI 2003.

^aExports of Japanese foreign affiliates to Japan divided by total shipments of Japanese parents.

^bSales of Japanese foreign affiliates divided by total shipments of Japanese parents.

relevant to the incentives for regionalism. Historically, Japanese affiliates in North America and Europe have relied heavily on their corporate parents in Japan for technology, parts, and components, while they have rarely established export ties back to Japan. East Asian affiliates, however, have been more extensively integrated with Japanese production. Moreover, Japanese affiliates have increased their local procurement in the region and exports back to Japan since the Asian financial crisis. In 2000, East Asia accounted for 80 percent of ¥5.6 trillion in Japanese imports from foreign affiliates. Included in this total was ¥740.7 billion imported from China, up from ¥285.3 billion in 1996 (METI 2002b, 10–11).

Tables 37–39 examine the sales and trade of Japan's East Asian affiliates in the five industries with the most overseas production in the region: precision instruments, electrical machinery, industrial machinery, textiles and apparel, and transport equipment.¹⁰ Table 37 shows the sales destinations of East Asian affiliates in different areas to illustrate their varied functions. Some are market-seeking investments that sell primarily in host countries, as with transport equipment in ASEAN and the NIEs, and textiles and apparel in the NIEs. Other foreign affiliates serve as procurement sources for Japanese factories: precision instruments, industrial machinery, transport equipment, and textiles and apparel in China; industrial machinery and precision instruments in ASEAN; and precision instruments in the NIEs. Finally, there are export platforms, such as electrical machinery in all three areas, industrial machinery in the NIEs, and textiles and apparel in ASEAN.

Three generalizations lead to expectations about the trade preferences of Japanese multinationals. First, high affiliate sales to Japan strengthen the motives for regional trade liberalization to facilitate two-way trade flows for offshore procurement. Second, export platforms raise the risks of retaliation due to dependence on sales to third countries. Third, affiliates oriented toward local markets benefit from import barriers in host countries, which reduces the incentives for regional integration.

Applying these generalizations, table 37 points to four conclusions. First, large sales shares to Japan imply that production-sharing networks were most fully developed in precision instruments (in all three areas) and industrial machinery (China and ASEAN, but not the NIEs). Hypothesis 3 predicts the strongest support for regional trade liberalization in these two industries. Second, foreign affiliates in electrical machinery operated primarily as export platforms, secondarily as offshore suppliers; the sales orientation toward third

10. These data cover the fourth quarter 2001 through the third quarter 2002.

countries rather than Japan should temper the motives for regional arrangements. Third, offshore production of textiles and apparel served Japanese customers from China, third markets from Southeast Asia, and local consumers in the NIEs, again pointing to mixed incentives for regional arrangements. Fourth, transport equipment affiliates were oriented to host markets, where they benefited from continued trade protection—except in China, where Japanese companies were expanding offshore procurement.

TABLE 37. Sales of Japan's East Asian Affiliates, 2002

Industry/Area	Percentage of Sales in Host Country	Percentage of Sales to Japan	Percentage of Sales to Third Countries
<i>China and Hong Kong</i>			
Precision instruments	28.7	63.3	7.9
Electrical machinery	28.9	28.8	42.3
Industrial machinery	19.7	56.2	24.1
Textiles and apparel	43.6	47.1	9.4
Transport equipment	33.4	48.2	18.3
<i>ASEAN^a</i>			
Precision instruments	28.6	55.5	15.9
Electrical machinery	16.2	31.9	51.9
Industrial machinery	25.4	56.9	17.7
Textiles and apparel	45.3	14.0	40.6
Transport equipment	79.7	7.0	13.2
<i>NIE^b</i>			
Precision instruments	12.4	80.3	7.3
Electrical machinery	44.4	19.7	35.9
Industrial machinery	47.3	13.6	39.0
Textiles and apparel	70.1	0.8	29.1
Transport equipment	88.3	3.5	8.2

Source: Data from METI 2003.

^aIndonesia, Malaysia, Philippines, and Thailand.

^bSingapore, South Korea, and Taiwan.

TABLE 38. Intrafirm Trade of Japan's East Asian Affiliates, 2002

Industry	Percentage of Sales Exported to Japanese Parents			Percentage of Sales Imported from Japanese Parents		
	China	ASEAN	NIE	China	ASEAN	NIE
Precision instruments	29.6	28.8	32.3	16.8	10.4	10.3
Electrical machinery	17.8	22.8	15.8	10.8	9.5	17.3
Industrial machinery	50.8	7.9	21.5	18.3	5.4	13.1
Textiles and apparel	29.8	6.1	0.7	16.7	6.8	13.7
Transport equipment	46.2	4.9	0.8	30.5	15.7	16.6

Source: Data from METI 2003.

The intrafirm trade of Japan's East Asian affiliates in table 38 supports these generalizations. Foreign affiliates were most closely integrated with Japanese production in precision instruments, followed by electrical machinery and industrial machinery. In textiles and apparel and transport equipment, only Chinese affiliates had production-sharing links with Japanese parents.

These figures also suggest that the triangular trade patterns associated with the initial movement of Japanese firms into the East Asian region were disappearing. Foreign affiliates were no longer so heavily dependent on Japanese parents for technology, parts, and components, while Japanese parents used East Asia as a source of inputs and supplies more frequently. As table 39 shows, only Japanese affiliates in the NIEs ran deficits in intrafirm trade with Japan; ASEAN and China enjoyed large surpluses as a result of Japanese FDI (despite the deficit in the transport equipment trade of ASEAN countries).

Changing patterns of Japanese production, trade, and procurement also affected the trade of East Asian countries with one another as Japanese companies integrated the activities of affiliated firms and developed local suppliers. Intra-regional trade in East Asia, excluding Japan, was mostly electrical and electronic equipment (31.6 percent), machinery (15.9 percent), and chemicals (11 percent). By comparison, intra-regional trade was minuscule in motor vehicles (0.5 percent), motor vehicle parts (0.4 percent), and other transport equipment (1.3 percent). Generally, the data show growing procurement in East Asia for intermediate components incorporated in finished products ultimately sent outside the region. For example, the share of East Asian exports sold inside the region was high for inputs such as electronic tubes and semiconductors (68.1 percent), integrated circuits (58.7 percent), other electronic parts (51.2 percent), and parts for computers and peripherals (46.3 percent). By comparison, finished goods were exported outside the region, particularly audio equipment (85.2 percent extraregional exports),

TABLE 39. Intrafirm Trade Balances of Japan's East Asian Affiliates, 2002

Industry	All Asia	China	ASEAN	NIE
All manufacturing	574,971	315,610	343,201	-72,535
Electrical machinery	513,799	128,746	411,361	-26,368
Industrial machinery	169,345	149,962	5,969	13,158
Precision instruments	73,886	32,199	24,025	16,728
Textiles	9,124	13,132	-1,475	-3,647
Transport equipment	-195,889	12,664	-134,262	-55,677

Source: Data from METI 2003.

Note: Amounts are million Japanese yen.

video equipment (80.5 percent), and computers and peripherals (72.8 percent). Similar divisions existed in textiles and apparel: 52 percent of textile and fiber exports remained in the region, while 83.1 percent of clothing exports left Asia (JETRO 2003, 8–9).

To sum up, today production sharing by Japanese companies in the East Asian region is most developed in precision instruments, electrical machinery, and industrial machinery—notably photographic and optical equipment, consumer electronics, semiconductors and integrated circuits, and computers and peripherals. More so than in other branches of East Asian industry, “firms in the region are increasingly linked across borders in complex and ongoing relationships that extend beyond the boundary of the firm and span the entire value-chain in the given activity” (Borrus, Ernst, and Haggard 2000, 1). In these sectors, intrafirm trade is substantial, reverse imports are becoming significant, and triangular trading patterns have disappeared. These cross-border production networks integrate Japanese capital and technology, the managerial skills and know-how of firms from Taiwan and South Korea, and the labor pool available in Southeast Asia and China.

In other industries with high levels of FDI, notably textiles and apparel, transport equipment, and chemicals, production sharing remains in its infancy. In these sectors, intrafirm trade is less significant (except in transport equipment), intraregional trade is small, reverse importing into Japan is uncommon, and triangular trading links persist. Japanese affiliates in East Asia tend to service local markets or operate as export platforms; neither function integrates the region more closely with Japan.

In all of these industries, barriers to regional trade and investment inhibit further specialization along the value chain. East Asian countries retain high tariffs on many manufactured articles conducive to production sharing. METI points to high bound tariff rates in Malaysia on transport equipment (22.6 percent), textiles (21.5 percent), and electrical equipment (30 percent maximum); in Indonesia on transport equipment (30.6 percent), textiles (27.8 percent), and electrical equipment (26.1 percent); and in Thailand on transport equipment (47.6 percent) and electronics (31.6 percent).¹¹ Also, the AFTA Temporary Exclusion List delays trade liberalization for transport equipment, electronics, and machinery in certain ASEAN countries. Moreover, regional disputes threaten to disrupt production-sharing trade: China, for example, imposed 100 percent tariffs on Japanese automobiles, air conditioners, and cellular telephones in response to Japanese safeguards on certain agricultural goods

11. METI 2002a, 191–98. In practice, applied tariff rates tend to be lower than these figures.

in 2001.¹² Finally, equity restrictions, TRIMs, and other regulatory rules create persistent uncertainties for foreign investors in the East Asian region.

But the elimination of these barriers would have very different effects in different industries, as the following section illustrates. In electrical, electronic, and photographic equipment, regional integration would allow Japanese companies to further rationalize East Asian production by restructuring high-cost “mini-Matsus,” that is, small factories manufacturing full product lines for host markets.¹³ Specifically, foreign affiliates could be specialized to perform discrete steps along the supply chain to eliminate duplication and gain scale economies.

In other sectors, however, adjustment to regional free trade would be difficult. In “areas like automobiles, chemicals, textiles, or foodstuffs,” Legewie (2000, 89) notes, “the remaining tariff walls still limit the scope for further production concentration or confine it to the area of parts and components.” While regional trade liberalization would open up such opportunities, East Asian affiliates generally are less prepared to face tough competition. Moreover, multinational companies earn substantial rents in protected regional markets, and resistance to opening the Japanese market is stronger. Under these circumstances, incentives to form a regional arrangement are low.

Regionally Oriented Industries

As Japanese companies expand production in East Asia, increasingly they organize their activities on a regional basis. Leaders in this regionalization of production include Matsushita, which has moved to streamline its regional operations, centered in Malaysia, where the firm accounts for 4 percent of the manufacturing workforce, and Toyota, which has strengthened its production and supplier base in the region, particularly in Thailand, through its “Toyota Cooperation Club” (UNCTAD 2001, 146–47). These strategies have created local industrial agglomerations, such as electronics around Penang, Malaysia, and automobiles along Thailand’s eastern seaboard; in some cases, production linkages extend back to Japan.

There is anecdotal evidence that this trend has raised Japanese industry’s interest in regional arrangements to liberalize trade and safeguard FDI. The proposed AFTA, according to Hatch and Yamamura (1996, 35), “was enthusiasti-

12. “Japan Call to China on Tariffs,” *Financial Times*, June 23, 2001, 8.

13. The term refers to affiliates of Matsushita, which was among the first Japanese electronics firms to invest in local production in East Asia. In the late 1990s, Matsushita still produced televisions at seven different locations in Asia (not including China, where it has established assembly plants more recently), a severe drain on economies of scale (Legewie 2000, 87).

cally received by Japanese multinationals.” Strong support for an expanded regional role exists in “important sections of Japan’s business community, which have been closely involved in talks on bilateral arrangements,” the *Financial Times* reports.¹⁴ Recently these pressures have been extended to China, as METI (2002a, 102) notes: “Among the Japanese companies that have entered China, an extremely large number have been calling for greater transparency of policies and measures, as well as consistent and fair implementation for all trade-related policies and measures.”

A deeper look at the incentive structures in Japanese industry suggests that support for a regional arrangement in East Asia is less extensive than it might appear, however. Regarding AFTA, Ravenhill (1995, 856) observes: “Many foreign investors favored liberalization of intraregional trade and welcomed the prospect of producing for a region-wide market. Others, who had committed themselves to high-cost, small production runs under import substitution regimes and local content requirements, were less enthusiastic.” The case studies in this chapter suggest that Japanese firms in electronics, electrical machinery, and precision instruments have reasons to embrace the welcoming approach to regional trade liberalization. Elsewhere, lack of enthusiasm tends to prevail. In the automobile industry, Japanese multinationals have sunk considerable capital in production strategies oriented to tariff-protected host markets, and liberalizing this trading environment would be costly. In textiles and apparel, large firms, particularly garment manufacturers, have developed production-sharing networks that would benefit from more open markets in both the region and Japan, but nationally oriented textile producers have mobilized to push for new barriers to imports, a sign of growing industry divisions over trade.

Electronics: FDI-Led Regional Integration

Electronic equipment was a leading export item in Japan’s postwar development, as producers penetrated foreign markets with transistor radios in the 1960s and proceeded to establish dominant positions in televisions and audiovisual equipment, integrated circuits, and photographic and optical equipment. In 1985, Japan controlled close to 90 percent of world markets for VCRs, photocopiers, and 256K and 1MB memory chips. By 1990, office machines, telecommunications equipment, and other electrical machines accounted for 29 percent of Japan’s exports, for the first time surpassing automotive products and other transport equipment (WTO 1998b, 159).

14. “Japan Aims for South Korea Trade Deal,” *Financial Times*, November 3, 2000, 6.

In 1985, table 40 shows, Japanese firms depended on sales abroad and strongly preferred exports to foreign production. The leading companies exported 20 to 50 percent of sales, and exports from Japan exceeded foreign production in every case—often by a factor of three or more. When companies had established East Asian production—which was not often—these investments served one of two purposes. First, cheap labor and regulatory incentives in export-processing zones attracted assembly-based manufacturing destined for foreign markets. Second, Japanese companies established “mini-Matsus” to manufacture “simple products like batteries, radios, electric fans, rice cookers and other low-end home appliances, small TV sets and some related components” for protected host markets in Southeast Asia (Ernst 2000, 82).

After 1985, electronics companies rapidly transferred manufacturing functions from Japan to East Asia. The yen’s rise after the Plaza Accord, followed by another round of appreciation after 1990 and the collapse of the bubble economy in Japan, “forced firms to cut costs at every stage of the value-chain” (Ernst 2000, 93). While previously East Asian affiliates manufactured a full range of household items, processes gradually were specialized across countries. Because the strong yen made components imports from Japan expensive, firms persuaded their suppliers to move offshore or developed local procurement sources. To compete more effectively with South Korean producers that had gained a price advantage from exchange rate movements, companies such

TABLE 40. Export Dependence of Electronic and Photographic Equipment Companies

Company ^a	Exports from Japan as a Percentage of Total Shipments		Exports from Japan Divided by Sales of Foreign Affiliates	
	1985	2001	1985	2001
Hitachi	19.9	12.4	1.6	0.5 ^b
Matsushita Electric	25.2	19.9	3.6	0.7
Sony	53.5	26.8	2.6	1.3
Toshiba	21.8	21.2	3.6	0.7
Fujitsu	20.1	11.2	3.0	0.8 ^b
NEC	27.2	12.9	4.5	
Mitsubishi Electric	23.7	16.3	1.9	1.0
Canon	44.9	47.0	1.7	1.6
Sanyo Electric	42.3	19.3	13.6	0.9 ^b
Sharp	49.5	29.6	7.3	
Fuji Photo Film	31.2	23.3		0.4
Ricoh	33.7	19.5		1.3 ^b

Source: Data from UNCTC 1988, 533–45; UNCTAD 2002, 47.

^aDescending order of total sales in 2001.

^bBased on sales of foreign affiliates in 1996.

as Matsushita established “global export platform mega-plants” in Southeast Asia to maximize scale economies (Ernst 2000, 89).¹⁵

As part of this process, companies increasingly relied on East Asian affiliates as procurement sources for Japanese production. The share of intermediate components in imports increased by 50 percent or more for computers and peripherals, electrical appliances, telecommunication equipment, and heavy electric machinery (WTO 1998b, 109). In addition, firms began to reverse import finished goods: for example, reverse-imported color televisions into Japan jumped from 1.7 million in 1989 to 6 million in 1994, and increases also occurred in audiovisual equipment and computer products. To reduce frictions over Japan’s large trade surpluses, Matsushita issued plans in 1989 to import 10 percent of the components for its Japanese production. When the firm achieved its ¥420 billion target two years early in 1991, it established a goal of ¥600 billion for 1993. Toshiba also sought to double imports to ¥200 billion and increase foreign production from ¥300 billion to ¥500 billion by 1992. These changes reduced exports relative to output in Japan and boosted foreign production, as table 40 illustrates. As imports climbed, firms shifted from consumer electronics to higher-margin industrial electronics and electronic components. With the large share of intrafirm trade and outsourcing in imports, there were no calls for trade protection (Yoshimatsu 2000, 92–99).

The regionalization of Japan’s electronics industry not only has integrated East Asia into Japanese production but also has promoted trade and production linkages among East Asian countries. Specialization in the region has operated in tiers, with Japan at the top; the four NIEs on the second rung; Malaysia, Thailand, Indonesia, and the Philippines third; and finally China and Vietnam. These development patterns have been “highly conducive to the emergence of regional production networks” because they “created unusually heterogeneous production capabilities and thus a high degree of intra-regional complementarity” (Borras, Ernst, and Haggard 2000, 12–13). At the same time that these regional production networks provide a motive to open markets further, the legacy of import substitution—an ongoing industrial dualism in which mini-Matsus co-exist with modern, large-scale export platforms—suggests that regional trade liberalization would create opportunities for multinational companies to enhance productivity through economies of scale.

15. The responses of individual firms varied. Matsushita regionalized aggressively, as its affiliates quickly shifted from host markets to “export platform production . . . on a massive scale.” In contrast, Sony concentrated most of its overseas production in North America and Europe, while in East Asia it moved abroad more tentatively. Today, Ernst concludes, “Sony’s Asian production networks are still relatively underdeveloped.” Small firms such as Sanyo, Aiwa, and Uniden were the first to establish outsourcing arrangements in East Asia, during the late 1970s (Ernst 2000, 91–93).

At least until recently, these incentives apparently had not reached a critical mass. According to Ernst (2000, 90), while electronics companies “have been more substantially exposed to international production” than other branches of Japanese manufacturing, “they still lag behind their American and European counterparts.” Ernst (2000, 82–86) and Guerrieri (2000, 44–50) also note the persistence of triangular patterns in East Asian electronics trade into the late 1990s—evidence that Japanese production networks remained “highly centralized” and closed to outsiders. Yet the latest data, presented earlier, suggest that trade triangles are gone, reverse imports have grown, and procurement has opened up. These trends suggest large benefits for Japanese companies from regional trade liberalization.

The JSEPA treaty is consistent with these imputed interests. Electronics and components account for 45 percent of Singapore’s manufacturing, an extreme level of specialization. More than 40 percent of the industry’s employees work in Japanese affiliates (WTO 2000a, 89). Singapore also is the world’s third-largest exporter of office and telecommunication equipment, after the United States and Japan, and the sixth-largest importer.¹⁶ Though tariffs on Japan-Singapore IT trade had been phased out under the WTO, the JSEPA treaty went further, eliminating nontariff barriers and easing administrative and customs burdens. The arrangement also established liberal rules of origin, in recognition that “companies are typically tightly integrated into an intricate supply chain network throughout the region” (Joint Study Group 2000, chap. 2, 5).

Even greater gains could be reaped from regional arrangements with countries that previously practiced import substitution, where tariffs are higher and restrictions on Japanese affiliates greater. For example, while most electronics can be imported into Indonesia duty-free, televisions and TV components must pay 20 percent tariffs (WTO 1998a, 110). Such barriers exist throughout Southeast Asia. Without these nuisances, Japanese companies could assimilate their domestic operations, mini-Matsus, and newly established export platforms into a unified multinational structure to specialize production and gain scale economies. Thus, pressure from the electronics industry for regional arrangements is likely to continue to gain strength.

Automobiles: Building a Regional Fortress

Japan’s automotive industry, like its electronics industry, has been highly export oriented. Table 41 shows that the four leading automakers exported 43–66

16. “Information Technology (IT) Products: Free Trade for a Dynamic Trade Sector,” WTO, http://www.wto.org/english/thewto_e/minist_e/min01_e/brief_e/brief10_e.htm.

TABLE 41. Export Dependence of Automotive Companies

Company ^a	Exports from Japan as a Percentage of Total Shipments		Exports from Japan Divided by Sales of Foreign Affiliates	
	1985	2001	1985	2001
Toyota	43.0	30.8	8.6	0.5
Honda	53.1	27.4	4.0	
Nissan	48.9	25.0		0.6
Mazda	66.3	33.9	34.9	0.6
Nippon Denso	13.3	15.8	0.8	
Isuzu	58.6	31.1	45.1	5.5
Suzuki	44.0	39.3	3.3	3.4 ^b
Daihatsu	16.7		1.4	
Fuji Heavy Industries	59.9	30.1		1.1 ^b
Kawasaki Heavy Industries	41.0	34.4	10.5	
Yamaha Motor	67.8	50.7	10.8	0.7

Source: Data from UNCTC 1988, 533–45; UNCTAD 2002, 47.

^aDescending order of total sales in 2001.

^bBased on sales of foreign affiliates in 1996.

percent of their sales in 1985. Even the largest companies centralized production in Japan, with little output abroad. VERs by the United States and the EC caused Japanese automakers to begin manufacturing in North America and Europe in the 1980s. By 2001, all except second-tier producers Isuzu and Suzuki generated more sales abroad than they exported from Japan.¹⁷ But even as companies transferred capacity overseas, East Asia was not an important destination for FDI: North America accounted for 65 percent of foreign affiliate sales, Europe 13.1 percent, and East Asia only 11.5 percent (METI 2003).

Unlike the electronics industry, Japan's East Asian automotive affiliates produce for host markets exclusively. Table 37 shows that in the four ASEAN countries, which accounted for three-quarters of affiliate production in the region, 79.7 percent of sales were made locally in 2002; in the NIEs, which accounted for one-fifth of Japan's East Asian production, 88.3 percent of sales were domestic. These figures were down slightly from 1997, when 86.1 percent of ASEAN and 91.5 percent of NIE sales were local. Though affiliates in the two areas imported one-sixth of their sales from Japan, they almost never exported back to Japanese parents (see table 38).

The reason for these patterns of production and trade is simple: high tariffs

17. Even so, Japan exported 4.4 million of the 10 million automobiles it produced in 1998. Japanese companies manufactured an additional 2.4 million vehicles in the United States and 910,000 in the EC that year (WTO 2000b, 91).

TABLE 42. Automotive Policies in Southeast Asia

	Tariffs (%)		Local Content Rules (%)	
Malaysia	<i>Import duties</i>		Passenger cars	45–60
	Completely knocked down	42		
	Completely built up ^a	200		
	<i>Excise taxes</i>			
	Passenger cars	25–65		
	Motorcycles	10–20		
	Other vehicles	0–45		
Indonesia	<i>Import duties</i>		Tariffs on automobile parts vary inversely with local content, from 100% (20% local content or less) to 0% (60% local content or more); for commercial vehicles, tariffs range from 40% (20% local content or less) to 0% (40% local content or more).	
	Passenger cars	200		
	Jeeps	100		
	Other vehicles	0–100		
	<i>Built-up vehicle surcharge</i>			
	Passenger cars	100		
	Other vehicles	40		
Thailand	<i>Import duties</i>		Passenger cars	54
	Completely knocked down	22	Motorcycles	70
	Completely built up	80	Other vehicles ^b	60–100
			Automobile engines ^c	20–70
	<i>Excise taxes</i>		Motorcycle engines ^c	30–80
		37–50		

Source: Data from WTO 1997, 104–7; WTO 1998a, 68–69, 112–15; WTO 1999, 62, 99.

^aLimit 80 per company.

^bExact figure depends on size and type of vehicle.

^cLocal content requirement increases by 10% each year after production begins.

and local content rules forced Japanese firms to manufacture locally to access national markets, particularly in Southeast Asia. Table 42 summarizes automotive policies in Malaysia, Indonesia, and Thailand. In each case, completely built-up cars are subject to high tariffs, import licensing, and other surcharges and excise taxes; completely knocked-down vehicles, though less heavily taxed, face significant barriers as well.¹⁸ Automobile assemblers also must satisfy local content rules to avoid sanctions (Malaysia), earn corporate tax exemptions (Thailand), or secure import tariff rebates (Indonesia).

Because foreign affiliates have been oriented to host markets, unexploited scale economies are substantial. Most plants manufacture less than 10,000 vehicles, and few models sell more than 5,000 units. In 1993, Thailand produced 419,861 automobiles, trucks, and buses, up from 98,148 in 1987, and Japanese

18. Even Singapore imposed uncharacteristically high tariffs of 41 percent on motor vehicles and 12 percent on motorcycles (WTO 1996, 77).

affiliates contributed more than 90 percent of this output. Divided among twelve assemblers and thirty-five models, this amounted to 35,000 vehicles per firm and 12,000 per model (WTO 1995c, 105). In Malaysia, where Japanese affiliates coexist with national firms Proton (a joint venture with Mitsubishi) and Perodua (a joint venture with Daihatsu), output per company was 14,983 (WTO 1997, 104).

To expand volume and eliminate duplication in parts manufacturing, Japanese companies have pushed for regional liberalization in ASEAN. In 1988, ASEAN adopted the Brand-to-Brand Complementation (BBC) program, which provided tariff preferences for automotive parts traded among designated producers located in different ASEAN countries. The BBC, Ravenhill (1995, 852) writes, originated "at the behest of Japanese automobile companies which by then had established a dominant position in the Southeast Asian market." Mitsubishi Motors, which owned factories in Thailand, Indonesia, and the Philippines, in addition to its Proton joint venture in Malaysia, proposed the idea in 1987 to the ASEAN Committee on Industry Materials and Energy in an effort to integrate production regionally and reduce overhead. Mitsubishi's plan involved 90 percent tariff rebates on imported parts, plus local content credits for exports from ASEAN, so that the firm could centralize components manufacturing and reduce regulatory compliance costs. In the final plan, ASEAN countries reduced tariff preferences to 50 percent and limited these benefits to automotive assemblers, which had to submit formal proposals to gain approval. Indonesia initially refused to participate in the BBC. Even so, companies lined up to submit plans, beginning with Mitsubishi, followed by Toyota, Honda, Nissan, and the Swedish automaker Volvo (Machado 1994, 313–18).

The BBC scheme opened up opportunities for Japanese companies to develop regional production networks. In addition, firms needed to gain scale economies not only in assembly but more significantly in parts such as alternators, distributors, and starter motors because national markets in Southeast Asia were a small fraction of MES. Automotive assemblers straining to meet local content rules pressured their suppliers to begin production in ASEAN. This increased procurement within the region and reduced imports of parts and components from Japan. For example, Toyota integrated its three plants in Thailand with factories in Indonesia, Malaysia, and the Philippines to centralize production of intermediate components: diesel engines and pressed parts were sourced in Thailand, gas engines in Indonesia, transmissions in the Philippines, and steering gears and automotive electronics in Malaysia; a trading center in Singapore monitored and coordinated the transfer of these components across factories. Subsequently, Toyota's intra-affiliate trade in ASEAN

soared from ¥1.6 billion in 1992 to ¥15.5 billion in 1994, and then to ¥35.6 billion in 1996 (Yoshimatsu 2002, 131–32; Hatch 2004, 160–65).

Because of the development of regionally oriented production and supply systems in Southeast Asia, Hatch (2004, 161) writes, Japanese automakers “have . . . endorsed the ASEAN Free Trade Agreement.” The January 1992 ASEAN summit envisioned AFTA by 2007, with 0–5 percent tariffs under the Common Effective Preferential Tariff. Due to these plans, the BBC program was deemed unnecessary and scheduled for termination. But companies had sunk substantial capital in anticipation that reorienting their operations from a national to a regional basis would continue to earn them special privileges. Thus, “MNCs and their local affiliates opposed the scrapping of the BBC scheme. . . . The Japanese government and the Japanese Automobile Manufacturers Association (JAMA) also opposed the scrapping.” Nippon Denso, the largest automotive components producer in Japan, not only lobbied to retain the BBC program but also sought to extend it from assembly to parts (Yoshimatsu 2002, 131–32).

Pressure from assemblers and parts producers led to the establishment of the ASEAN Industrial Cooperation (AICO) program to replace the BBC scheme in 1996. Under this arrangement, firms located in different ASEAN countries could form AICO partnerships (provided that ASEAN nationals held 30 percent of the equity) to gain 0–5 percent preferential tariffs on their mutual trade, local content accreditation for parts imported from one another, and additional incentives. After the financial crisis, a temporary waiver of the equity rule and the program’s extension to intra-affiliate trade eased AICO eligibility. These changes reflected “demands from the private sector,” as Japanese companies and JAMA pushed to eliminate restrictive provisions and speed the implementation of the program.¹⁹ Approvals soared from 2 in 1998 to 101 in 2003.

Though firms outside the automotive industry can earn AICO privileges, table 43 shows that automakers have accounted for 87.2 percent of approved proposals since its inception. Moreover, Japanese-affiliated companies have earned nine out of every ten AICO approvals for automotive products, led by Toyota and Honda with twenty-seven each. Over the last five years, Honda

19. Multinationals opposed the equity rule in the AICO plan, as some had to boost the stakes of local investors to qualify. Toyota employed an “umbrella” method of applying on behalf of its suppliers (which therefore would not have to meet the requirement), but ASEAN countries reaffirmed the 30 percent equity requirement in 1997. With the onset of the financial crisis, however, this rule became self-defeating since local firms needed greater foreign participation in their capital structure to survive the downturn. See Yoshimatsu 2002, 132–34, 138–41.

TABLE 43. AICO and Japanese Companies

By Product Category	Number of Approvals	Share of Approvals
Automobile assembly	74	73.3
Automobile components	14	13.9
Electronic and electrical products	5	5.0
Food processing	5	5.0
Machinery	2	2.0
Glass	1	1.0

By Company	Number of approvals ^a	Share of Approvals
Toyota	27	26.2
Honda	27	26.2
Nippon Denso	7	6.8
Nissan	5	4.9
Volvo (Sweden)	5	4.9
Nestlé (Switzerland)	4	3.9
Goya (United States)	4	3.9
Yamaha Motor	3	2.9
Mitsubishi Electric	3	2.9
Mitsubishi Motors	2	1.9
Sony	2	1.9
Isuzu	2	1.9
Ford (United States)	2	1.9
All others (1 approval each)	10	9.8

Source: Data compiled from “Approved AICO Applications as of 10 February 2003,” ASEAN Secretariat, <http://www.aseansec.org/6398.htm>.

^aTotal adds to 103 because two projects include more than one foreign-owned firm.

saved ¥6 billion on import tariffs and another ¥4.6 billion by eliminating duplication; the company expanded ASEAN sourcing from 4.8 percent to 20.8 percent of inputs and cut imports from Japan to 34.9 percent from 55.4 percent (Yoshimatsu 2002, 142).

Despite their enthusiasm for ASEAN trade liberalization, Japanese automakers have opposed opening the region to outside imports. A Thai Board of Investment report notes, “Japanese manufacturers and their Thai joint venture partners have a formidable store of vested interests and carry tremendous influence in policy-making circles. Liberalization policies directly threaten the comfortable operating environment they have constructed over the past twenty years.”²⁰ Surveying recent events, Hatch (2002, 253) writes:

20. “World’s Car Makers Prefer the Thai Tiger: An Opening Market in a Sea of Protection Makes Thailand the Region’s Leader,” *Financial Times*, November 9, 1994, 4.

Japanese automakers likely cooperated in a bid to keep non-Japanese automakers from gaining a foothold in Southeast Asian markets. Organized around groups such as the Thai Automotive Industry Association and the Association of Indonesian Automotive Industries, Japanese automakers lobbied to maintain restrictive measures such as a relatively high tariff on imports from outside ASEAN and domestic content requirements that impede market entry.

Lately Japanese companies have resisted U.S. pressure to open up automotive trade in the region. Toyota has argued that the liberalization of ASEAN automotive policies should be phased in over long periods to allow established companies time to adjust. Thai parts producers, including affiliates of Nippon Denso, lobbied to increase tariffs on completely knocked-down vehicles from 20 percent to 33 percent in 1999. Takashi Imai, head of Keidanren, succinctly expressed the views of Japanese automakers: “all ASEAN companies would go into bankruptcy if tariffs were removed all at once. Accordingly, tariffs should be removed gradually, targeting the year 2010 or 2020. But, it is better to remove tariffs within the ASEAN region” (Yoshimatsu 2002, 142–43).

Because production linkages between Japanese plants and East Asian affiliates are limited, it is even doubtful that Japanese automakers would want a regional arrangement between ASEAN and Japan. Though Toyota, Honda, and Nissan implemented import expansion programs starting in 1989, these plans focused on reverse importing from the United States to defuse UAW pressure for local content rules on Japanese affiliates and antidumping actions by the Big Three. In 1997 North America accounted for 36 percent of the minuscule total of automotive products reverse imported into Japan, compared to just 40 percent for ASEAN.²¹ After the financial crisis, Toyota, Honda, and other firms expanded Southeast Asian procurement to assist foreign affiliates and keiretsu suppliers. As a result, reverse imports from ASEAN more than doubled in 1997–2002, from ¥33.4 billion to ¥87.2 billion.²² But these increases came off low base amounts, and overall sourcing from the region remains insignificant as a proportion of output in Japan.

Thus, Japanese automakers have shifted from national to regional strategies, premised on the expectation of continued liberalization in ASEAN and the preservation of external barriers against outside competitors. Toyota Motor Thailand, which already acquires 79 percent of its inputs from Toyota-affiliated

21. Mostly these were Honda Accords produced in Ohio. See Yoshimatsu 2000, 66–71, 79–82.

22. Over the same period, reverse imports from China and Hong Kong soared from ¥8.6 billion to ¥39 billion (METI 2003).

companies and Japanese joint ventures in the region, seeks to achieve 100 percent local procurement by the time AFTA automotive commitments are implemented in 2005 (UNCTAD 2001, 146). Japanese firms also have raised their equity stakes in joint ventures in anticipation that protected national markets soon will be opened to regional trade.²³ In the meantime, barriers to entry have been increased as Thailand extended local content rules and raised tariffs on completely built-up autos and Malaysia and the Philippines introduced new tariffs on automobiles and parts during the financial crisis. For Japanese companies ensconced inside their ASEAN fortress, the continued separation of East Asia's automotive industry from the outside world merely extends their dominance in the region.

Textiles and Apparel: Protectionists versus Regionalists

Labor-intensive manufactures are the most heavily protected activities in Japan after agriculture. Japan imposes its highest tariffs on footwear (51.4 percent), leather products (12.6 percent), and clothing (10.9 percent).²⁴ Despite these restraints, employment in textiles, apparel, and fibers declined by one-third to 825,000 in 1996 from 1.2 million in 1985, as twenty-one thousand factories closed in barely a decade. In textiles and apparel, Japan shifted to a net import basis in 1987, and imports soared from 16.3 percent of consumption in 1980 to more than 50 percent after 1993 (Yoshimatsu 2000, 133). A key factor has been the growth of Chinese competition.²⁵ Even in capital-intensive synthetic fibers, Taiwan, South Korea, and China have moved ahead in polyester staple and filament, leaving Japan in the lead only in acrylic. Thus, "Japanese textile producers have been apprehensive about the rapid increase in the production capacity of their Asian neighbors" (Yoshimatsu 2000, 157).

Larger companies began to move offshore in the 1970s. In fact, they were among the first in Japan to do so, as textiles and apparel (including synthetic fibers) accounted for 40 percent of Japan's FDI stock in East Asia in 1974. The two leading firms, Toray and Teijin, were responsible for almost all of this

23. Daihatsu, now part of Toyota, increased its share of Perodua, Malaysia's second-largest automaker, from 25 percent to 51 percent. This move came in preparation for the cut in Malaysian auto tariffs (delayed to 2005) from as high as 300 percent to no more than 5 percent ("Daihatsu Control of Perodua Stirrs Malaysian Resentment," *Financial Times*, September 5, 2001, 31).

24. WTO 2000b, 141–43. Tariff-rate quotas apply rates as high as 60 percent on overquota imports of footwear and leather products.

25. Among Japan's twenty fastest growing import categories in 2000, China's import share surpassed 70 percent in seven categories: tee shirts, women's formalwear, women's blouses and shirts, sweaters and jerseys, men's formalwear, men's shirts, and sportswear (JETRO 2001, 20).

investment. But rather than transferring capacity out of Japan or increasing regional procurement, the big two sought to maintain their markets for fiber exports by integrating into weaving, processing, and finishing.²⁶ Moreover, import licensing discouraged apparel firms from developing offshore supply chains. In the 1980s, Dore (1986, 196–97) noted that METI had approved a few licenses for outward processing in China but added: “generally the procedure is sufficiently cumbersome to be an effective deterrent.”²⁷ Producers in Hong Kong, Taiwan, and South Korea were too advanced to require Japanese technology or materials. Thus, FDI did little to integrate East Asia more closely with Japan.

Meanwhile Japanese lobby groups pushed for trade protection as the industry faced growing import competition. The Japan Textile Industry Federation and the Japan Spinners Association sought MFA quotas against South Korea and Taiwan as early as 1973, and the Japan Cotton and Synthetic Fiber Weaving Association began to push for import limits on Chinese cotton fabrics in 1975. Protectionist pressures intensified with escalating imports, as at least four industry associations petitioned for MFA quotas in 1985–88. Unable to win lasting protection, despite lobbying the Liberal Democratic Party (LDP) to pressure METI, lobby groups turned to unfair trade laws. Between 1982 and 1993, METI investigated just seven antidumping and countervailing duty cases—four involved textiles and apparel. These claims resulted in VERs on cotton yarn from South Korea and raw silk and silk fabrics from South Korea and China (Yoshimatsu 2000, 135–40).

Finally METI relented and organized hearings to prepare for MFA restrictions, resulting in guidelines for their application in 1994. Though small, nationally oriented yarn, fiber, and knitwear producers were the most enthusiastic, large companies with overseas operations also backed the protectionist cause at first (Yoshimatsu 2000, 141–43). As pro-MFA pressures gained strength, a Teijin executive complained that without trade barriers, “the textile and clothing industries will be sacrificed.”²⁸ Large textile companies continued

26. Uriu 1996, 157–60. In contrast, apparel producers never had important markets in East Asia. These firms were smaller, short of funds, and lacking in firm-specific proprietary advantages, so their FDI was low. Foreign affiliates operated primarily as low-wage export platforms to service third countries.

27. METI rarely granted these licenses “in view of the effects on domestic industry.” Dore (1986, 202–3) concluded: “Importing is, to begin with, a slightly disreputable activity and has become more so as the industry has got into worse trouble.”

28. “We want the government to limit imports, but they are hesitating. Personally, and in the industry as a whole, we are very dissatisfied with the government,” a Kurabo official explained (“Hanging on by a Thread: Tariff Barriers and Low Foreign Labor Costs Are Driving Japanese Textile Production Offshore,” *Financial Times*, July 6, 1993, 19).

to restrain reverse imports because, a Toray official noted, these “would lead to serious damage to the Japanese textile industry” (Yoshimatsu 2000, 150–52). Apparel producers, however, opposed import restraints because they depended on outward-processing agreements and joint ventures with foreign subcontractors for the bulk of their inputs (Yoshimatsu 2000, 130–31, 143–46).

Ongoing shifts in production and trading patterns have further fractured the textile, apparel, and fiber industry. Over the last decade, companies such as Toray and Toyobo have started reverse importing from Asia, while others have withdrawn from foreign manufacturing (Yoshimatsu 2000, 147–52). Producers with offshore factories, particularly in China, resisted broader quotas on Chinese textiles in the mid-1990s. Thus, one report noted, “the industry calls for protection have generally come from smaller apparel [fabric] makers.”²⁹ Even today, there is no consensus on trade policy because many companies outsource production in the region.³⁰

Just as these divisions have blocked the negotiation of trade restraints with China, so too they make it difficult to open the Japanese market to East Asian fabrics and fibers. Even as larger textile companies move production offshore to adjust to cost pressures, small producers of standardized fabrics and knitwear can survive only if the domestic market is protected. Though firms facing import competition thus far have been reluctant to file for quotas under the new policy, no doubt they would mobilize more actively if faced with the prospect of losing present tariffs. Moreover, their competitive position continues to decline. This suggests that regional trade liberalization likely will remain controversial in Japan’s textile and apparel industry.

Nationally Oriented Industries

While regionally oriented industries in Japan have had some incentives to support East Asian integration, there are strong reasons for nationally oriented industries to oppose the opening of the Japanese market, both regionally and multilaterally. Protectionism in Japanese agriculture is the most significant barrier to regional arrangements involving Japan. Keiretsu ties and cartel behavior in Japan’s basic materials industries are a second major problem for regional trade initiatives.

Because of trade frictions and international pressures, multinationals and

29. “Japanese Mull China Offer to Restrain Textile Exports,” *Journal of Commerce*, December 7, 1994, 3A.

30. “Low Prices Have Become the Fashion,” *Financial Times*, January 16, 2001, 36.

other large firms in Japan began to push the government to open trade and ease customs and certification procedures around 1982. Working through Keidanren, a federation of 120 industry associations including JAMA, the Electronic Industries Association of Japan, and the Japan Iron and Steel Federation, these companies “exercised their considerable political and economic power to liberalize economic institutions” (Yamamura 1994, 41). Keidanren and individual firms argued that trade friction threatened to provoke foreign retaliation against Japanese products and affiliates. After 1990, this lobbying also focused on domestic deregulation and opening the economy to FDI. At first such pressures faced bureaucratic resistance from METI and the Ministry of Finance, but over time these agencies became more favorable to liberalization and reform (Yoshimatsu 1998, 329–38; Yamamura 1994, 38–41).

Despite unsuccessful efforts to promote liberalization in agriculture, pro-trade industry groups have pushed more aggressively in recent years, particularly on heavily protected products such as rice and grains (Yoshimatsu 1998, 338–41). According to Yamamura (1994, 42):

[M]ultinational firms, the largest financial institutions, Keidanren, and other major economic organizations became eager to diffuse trade friction and became willing to exercise their considerable power over the LDP cabinets and party leaders . . . to “sacrifice” rice farmers despite vociferous opposition from Diet members dependent on farm votes.

Yet the pace of change remains slow in Japan, and both the willingness of industry groups to expend resources to promote change and their influence within the policy process are limited. As a result, branches of the Japanese economy, notably agriculture and basic materials, are still closed to imports from the region and the world.

Agricultural Protectionism

Farmers are the most protected group in the Japanese economy. Agriculture’s political strength resides in the effectiveness of farm lobbies, their influence within the LDP, and (until recently) the single nontransferable vote electoral system. Nowhere is this more apparent than in the import regime for rice. Japan imported just 0.8 percent of its rice consumption in 1999. The “virtual ban on rice imports” amounted to an implied nontariff barrier of 737 percent. Though quantitative controls were converted to tariff-rate quotas, the WTO concluded that this was not likely to increase imports because of the prohibi-

tive ¥351.2 per kilogram tax on overquota imports. In addition to rice, implied nontariff barriers exceeded import prices for tea and roasted coffee (707 percent), wheat (478 percent), soybeans (424 percent), tobacco (241 percent), dairy products (229 percent), oats (141 percent), processed vegetables (139 percent), raw sugar, beef, and oranges (Sazanami, Urata, and Kawai 1995, 21–24). Recently, the WTO (2000b, 83–85) reported high tariffs on dairy products (68.1 percent), grains (33 percent), vegetables (32.1 percent), sugar and confectionery (30.6 percent), oils and seeds (26.4 percent), and preparations of cereals, flour, and starch (22.8 percent). Moreover, specific tariffs and tariff-rate quotas apply to many of these product categories.

Political opposition to opening Japan's agricultural market made Singapore an attractive choice for the country's first bilateral arrangement. Singapore has no rice production, and agriculture contributes only 0.1 percent of its GDP and 2 percent of its exports. As a result, agriculture, forestry, and fisheries accounted for only 1.9 percent of Japan-Singapore trade in 1999, and 0.5 percent of Japan's agricultural imports came from Singapore (Joint Study Group 2000, chap. 2, 3–4). Even so, the Ministry of Agriculture, Forestry, and Fisheries, under pressure from the farm lobby, protested trade liberalization for cut flowers and ornamental fish.³¹ In the end, agricultural imports into Japan were excluded from the JSEPA treaty.³²

The farm lobby has demanded a blanket exemption from all trade agreements, so future bilateral or regional deals risk angering agricultural groups. Because Singapore has little agriculture, the JSEPA treaty covered 94 percent of Japan's imports. If Japan were to attempt a free trade agreement with, say, Thailand—Asia's leading rice exporter, with 20 percent of the world market (WTO 1999, 82)—this could run afoul of the Article XXIV requirement to liberalize “substantially all trade.” Studies suggest that even free trade with South Korea would create severe adjustment costs for Japanese farmers. Thus, Scollay and Gilbert (2001, 43, 47) conclude:

[Such an arrangement] would bring together two countries known for their fierce resistance to agricultural trade liberalization within the WTO, fueling suspicions that they may see a bilateral FTA as a way to pursue the benefits of trade liberalization in a framework that would allow the exclusion of all sensitive agricultural and other natural-resource-based products.

31. “Japan's Dream of a Free-Trade Future Stumbles over Farming,” *Financial Times*, July 11, 2001, 12.

32. “Japan Agrees Trade Accord with Singapore,” *Financial Times*, October 15, 2001, 17.

In the case of Mexico, the *Financial Times* reports, “Japanese manufacturers badly want an FTA,”³³ yet JETRO (2000, 9) concluded that free trade would “lead to an overall collapse of the existing systems and have a far-reaching impact on domestic production.” Agriculture also has been a source of trade friction with China, as efforts to mobilize the farm vote in 2001 elections through safeguard actions on shiitake mushrooms, leeks, and tatami rushes (used for mat-making) provoked retaliation against certain Japanese manufactures.

While Japanese industry recently has warmed to the idea of regional and bilateral trade deals, there are limits to how far industry groups will go to impose change on the farm sector. For example, Keidanren chairman Takashi Imai called import restraints on Chinese agricultural goods “very foolish” but added: “Rice is very important to Japan’s economy and society. We have to consider the need for self-sufficiency.”³⁴ Though there are signs that Japanese officials may be willing to include farm goods in future trade discussions to avoid being left out of the trend toward trading blocs,³⁵ it remains doubtful that they will be able to negotiate comprehensive trade agreements when liberalizing agriculture carries such high political costs.

Basic Materials: Keiretsu Ties

Another barrier to Japan’s participation in regional arrangements exists in basic materials such as steel, nonferrous metals, petrochemicals, and cement. East Asian countries have developed price advantages and export potential in these industries as they have gained access to modern technology and built large-scale capacity. Yet inside Japan, industrial collusion and keiretsu ties, which often induce users of basic materials to buy high-cost domestic output instead of cheaper imports, limit market access for producers in the region.

Japanese basic materials industries lost competitiveness due to the post-1973 oil crisis (which increased energy costs and raised prices for petroleum-based raw materials), the yen’s appreciation, and the growth of competing production in developing countries. All of the industries listed in the preceding have been covered under METI cartel laws, ostensibly to promote adjustment, as all suffer high costs and charge prices in the domestic market well above import prices. Yet only the aluminum industry had been exposed to import competition by the early 1990s; steel, petrochemicals, and cement continued to

33. “Japan’s Dream of a Free-Trade Future Stumbles over Farming,” *Financial Times*, July 11, 2001, 12.

34. “Seoul Cool on NE Asian Trade Zone Plan,” *Financial Times*, November 8, 2001, 13.

35. *Ibid.*

record trade surpluses. Unlike in aluminum, where foreign affiliates supply most imports into Japan, Japanese-owned steel and petrochemical plants abroad also do not reverse export (Tilton 1996, 9–11, 38–47, 58–66, 138–39; Uriu 1996, 178–85).

Moreover, consumers of basic materials traditionally have been reluctant to purchase supplies from foreign sources. The rise of low-cost steel manufacturing in South Korea and Taiwan led to informal VERs in the mid-1980s between the Japan Iron and Steel Federation and producers in the region, and Japanese distributors selling foreign steel were threatened with retribution (Wolff 1990, 151–52). When automakers prepared to shift to imports as steel prices escalated with the yen's appreciation, steel producers countered that they had an obligation to buy domestic steel. A few automobile firms and smaller ship-builders moved some of their procurement to South Korea after Nippon Steel raised prices in 1994. But most steel consumers, fearing retaliation, declined to buy cheaper imports (Uriu 1996, 228–29; Tilton 1996, 179–88). Keiretsu groups and government officials likewise sought to block cement imports from South Korea and Taiwan, as producers in these countries gained price advantages (Tilton 1996, 101–15). In addition, Sazanami, Urata, and Kawai (1995, 26) calculated substantial nontariff barriers for industrial materials such as caustic soda, methane derivatives, soda ash, and sheet glass.

Thus, regional integration between Japan and East Asia requires not only external treaties to reduce tariffs and nontariff barriers but also internal measures to complete the destruction of the keiretsu system that blocks foreign goods from entering Japan. East Asian countries have little to gain from regional arrangements with Japan if their exports cannot penetrate informal cartels and interlocking linkages between producers, suppliers, and distributors. Yet these business structures persist, in part, to exclude competing products, and basic materials industries have resisted their elimination. While regional trade liberalization could, in theory, provide a commitment mechanism to spur faster reform in Japan, in practice such a policy would have to overcome political opposition from industries that have benefited from informal means to close the Japanese market.

Conclusion: A Yen Bloc in East Asia?

This chapter's analysis of FDI by Japanese companies in East Asia suggests that, until recently, delays in creating regional procurement networks inhibited regional integration initiatives. Despite dramatic changes over the last decade, even today production-sharing linkages in East Asia are less broadly distributed

and not as developed as those of U.S. firms in North America or European firms in the EU. In Japan, intrafirm trade, regional procurement, and reverse importing are common only in electronics, electrical machinery, and photographic and optical equipment. Particularly in the automotive industry, Japanese FDI has promoted the integration of East Asian countries with one another but not with Japan, and companies have an interest in preserving this ASEAN fortress. In other cases such as textiles and apparel, divisions between regionalists and protectionists have stalemated industry lobbying on trade issues. Finally, export-oriented industries have a great stake in access to North American and European markets that could be harmed by the creation of a trading bloc in East Asia.

While the incentives to support regional arrangements in East Asia are limited, resistance to market opening remains strong in agriculture and basic materials. Japan therefore has not pursued regional arrangements with much enthusiasm, though it has taken tentative steps like the JSEPA treaty. The book's analytical framework suggests that grander initiatives for free trade with South Korea, China, or ASEAN are not likely to gain much traction. As the rest of the world moves toward trading blocs, Japan probably will remain a reluctant regionalist for the foreseeable future.